

A colourful clash is promised at the Spectrum end of the market. Richard King tests the TX8000

The Textet TX8000 sneaked onto the stage very quietly. This was amazing modesty for a machine that in almost every detail is targeted straight at the Sinclair Spectrum.

I tested a pre-production sample. Textet said that a few points remained to be cleared up, in particular the documentation and the tweaking of the TV signal.

Presentation

The micro arrives packed in foam, which should be strong enough to survive the rigours of the mails. All leads were included, but no demo tape. Textet apologised for this, and said that one should have been included.

The machine was easy to set up, needing only the power and TV leads to be connected; the tape-recorder can be plugged in at any time.

Documentation

The TX800 is aimed at customers who will be encountering computers for perhaps the first time, so the introductory session must be covered with extreme care in the production manual.

The one received with the machine was obviously very preliminary — *Setting up the TX800 personal computer* was covered in a single page, but this seemed adequate for a confident person.

Apart from this, it had several omissions, the most serious of which was the absence of any explanation of the many (up to five) uses of a key. Since a machine at this price (£98) can be intended only for the tyro, the complexities of multi-function keyboards must be made clear at an early stage to avoid disillusionment.

In the complete explanation of the Basic, several keywords appeared on the machine but were not mentioned in the text. These were COLOR, USR, SOUND, INP, OUT and COPY. Textet explains that this was a straight translation from the Chinese. Does that mean that the manufacturer didn't have these words implemented when it was written?

A short quick-reference chart of the keywords was included, but was little better than a list of words in natural groupings. No attempt was made to provide syntax-diagrams, parameter lists, limits or precedence, which means that you will have to experiment to find out what works and why, leaving aside what the expected result may be.

A list of the printable ASCII codes offered no information about what happens if codes 0 . . . 31 and 91 . . . 256 are printed. Finding out may be very interesting.

Textet assures us that a completely rewritten manual is being prepared. I hope the final version will be better than average because, despite my comments, I felt that the machine was fairly well presented.

Construction

The case is cream-coloured plastic and seems sturdy enough to withstand use by younger hands. The upper ventilation slots



would make it extremely difficult for anything large to be pushed in, but the ones underneath are not so impenetrable.

Keyboard

The calculator-type keyboard closely resembles that of the Sinclair Spectrum. It has printed legends in white and dark brown on the 45 tan-coloured rubber keys,

with smaller white printed legends.

This marking reveals that it is multi-function with auto-repeat and uses single-key entry for Basic. A useful touch is the way that related keywords are grouped.

Other advances over the Spectrum are that keywords on the TX8000 may be entered either by using the single-key method, or explicitly spelled. Being forced

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to use single-key entry may speed learning, but it's patronising.

The key-spacing is correct for typists but this does not mean that it's suitable. For one thing, there is no space-bar, just a slightly larger-than-normal key at bottom right, where the right-hand shift-key would normally be.

Lower-case is also absent since the shifted values of the letter keys are mostly used for the block graphic characters. Only X, C, V and B seem to have no shifted value.

The most important control-keys are on the right and have inverse legends above them. The topmost is BREAK, below that and to the right is the FUNCTION key which is shift-RETURN, then the editing keys INSERT and RUBOUT, and INVERSE. The four lower-right keys, used for cursor-movement, have little arrows to show their effect.

There is no RESET button, which is annoying. The manual suggests that the best way to get out of an infinite loop is to 'pull the plug'. I don't agree. If I write a program with a bug like that in it, I want to be able to stop the program and look at the variables to find out what happened. RESET is just the ticket if BREAK won't work.

Screen

The TX8000 will drive a normal TV tuned to channel 36-ish or a composite video colour monitor. A monochrome monitor can also be used, of course, but...

The display is a fairly small area in the centre of the screen surrounded by a dark green field, which has an unlit border. On a Sony Trinitron the image was steady and moderately clear.

The red and orange showed a marked slushiness at the edges, although the other colours were acceptably sharp. Colour differentiation was rather poor, too. Cyan and green were as near as dammit the same, and the white was greyish.

The screen has two modes, 0 and 1. Mode 0 is the text display consisting of 16 lines of 32 characters. Mode 1 is pixel graphics divided 128x64, and Textet is stretching the term a little to call it 'high resolution'.

Although the machine doesn't have lower-case, it has Sinclair-style block characters each made up of a 2x2 set of points.

Storage

Mass storage is on cassette and Basic provides a rudimentary COS, with CSAVE, CLOAD, CRUN and VERIFY. There is no mention of file-handling or block-records, and so no real data-handling capacity.

The most frustrating part of getting to know a machine of this type is trying to find the correct setting for playback. I almost ran out of unrepeatable expletives.

Expansion

At the back are the sockets for TV, composite video colour monitor, tape and power. There are also two metal plates

labelled 'memory expansion' and 'peripheral' which, pinned in by screws, hint that the company may have plans for the machine.

Power is supplied through a low-voltage co-axial plug, as in many lower-end machines, driven by a plug-in converter. This plug is not robust enough to withstand constant use.

The tape-socket is unusual; the cassette-recorder lead supplied has two normal 3.5mm jack-plugs at the recorder-end — the computer end is a 3.5mm stereo jack, so you won't be able to use any old length of cable with a plug at each end.

Textet says disk-drives of some kind, other accessories and a 64K memory expansion unit will be introduced as soon as possible. No dates. Details of interfaces

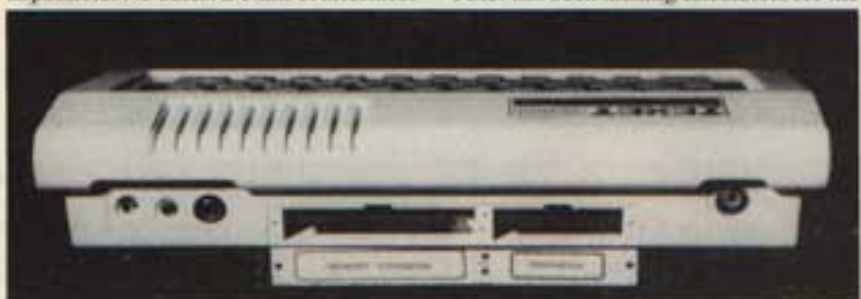
GOSUB may be resorted to. This is not allowed in many Basics, especially those descending from Applesoft or Pet Basic.

Editing is fairly sophisticated, being accomplished by the function keys on the right. The lower four move the cursor, with the → key acting as a COPY key; the others just move. INSERT and DELETE are different. They work anywhere, even on old text left on the screen.

There were no facilities for machine-level programmings, which makes the USR function hard to get at, but overall the implementation appears to offer a reasonable mix of facilities which should prove popular with its owners.

Support

Textet has been making calculators for the



Left to right: power, tape, monitor, memory and peripheral plates, TV

will be available, and more information will be in the new manual. Add-ons from other companies will have to wait till then.

Software

The Basic is of a fairly standard Microsoft type, with IF... THEN... ELSE, but no more sophisticated control-structures.

Accuracy is only to six digits — not really enough even for simple household accounting. The largest number would be 999.99 in pennies, the last digit being left out because it's always slightly wrong. Arrays seem to have only two dimensions.

This is not as bad as it first seems, since each dimension may be as large as memory will allow.

The graphics commands are a little weak. No PLOT... TO, LINE (x1, y1, x2, y2) or equivalent, but this could be remedied with a small machine-code library accessed by the USR command. I hope the makers or some enterprising programmer will provide this and other utilities.

There is no ON... GOTO/GOSUB command on the TX8000, which will annoy some users. Instead, the calculated

High Street outlets for some time, and clearly that's where the TX800 is aimed. No doubt many software houses will write for this micro. One hopes the quality will be better than the shoddy (but nice and cheap) stuff that people feed their long-suffering Spectrums, Beebs, Vic-20s and the like.

Textet promises a one-year guarantee, and repairs will be done at the Manchester headquarters. The company also says that the shops will be expected to exchange the machine if problems crop up early.

Overview

It's a pity Textet chose to be so modest with its memory: 8K is tiddly these days and not much cheaper than 16K, which is itself pretty mean. Some more advanced mass-storage and improvements in arithmetic precision would make the TX8000 useful in modest applications, although it will always be limited by the 32-character screen and lack of lower-case.

But with the enhancements hinted at by those two metal plates on the back — say 48K or more — this could be a very nice beginner's machine at a reasonable price.

SPECIFICATIONS

Price:	£98
Processor type/speed:	Z-80A running at 3.58MHz
Standard RAM/max RAM:	8K-64K with expansion
Text screen:	32 x 16
Graphic screen:	128 x 48
Keyboard:	45 calculator-type keys with auto-repeat
Storage:	Cassette
Interfaces:	Serial and parallel
OS/language(s):	Basic
Other languages:	None
Distributor:	Textet — sales will be through high street stores
Software supplied:	Demonstration tape